<u>S/N 10/643,742</u> <u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Steven L. Scott et al. Examiner: Hong Kim
Serial No.: 10/643,742 Group Art Unit: 2185
Filed: August 18, 2003 Docket No.: 1376.697US1
Customer No.: 21186 Confirmation No.: 4130

Title: DECOUPLING OF WRITE ADDRESS FROM ITS ASSOCIATED WRITE

DATA IN A STORE TO A SHARED MEMORY IN A MULTIPROCESSOR

SYSTEM (As Amended)

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Applicant respectfully requests review of the final rejection in the above-identified application. No amendments are submitted with this request.

This request is being filed with a Notice of Appeal. The review is requested for the following reasons:

§ 112 Rejections of the Claims

Claims 1, 21, 31, 34, and 38 were rejected under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. In particular, the Office Action mailed June 16, 2009 stated, at p. 3, fifth paragraph, that "compare memory request address to write address, if there is a match after comparing and if not matches after comparing which are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure." This rejection is respectfully traversed.

INDEPENDENT CLAIMS 1, 21, 31, 34, AND 38 ARE ENABLED BY DISCLOSURE IN THE SPECIFICATION AS ORIGINALLY FILED

A relevant portion of M.P.E.P. provides that:

Any analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable one skilled in the pertinent art to make and use the claimed invention. The

Serial Number: 10/643,742 Filing Date: August 18, 2003

Title: DECOUPLING OF WRITE ADDRESS FROM ITS ASSOCIATED WRITE DATA IN A STORE TO A SHARED MEMORY IN A

MULTIPROCESSOR SYSTEM (As Amended)

standard for determining whether the specification meets the enablement requirement was cast in the Supreme Court decision of Mineral Separation v. Hyde, 242 U.S. 261, 270 (1916) which postured the question: is the experimentation needed to practice the invention undue or unreasonable? That standard is still the one to be applied. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). Accordingly, even though the statute does not use the term "undue experimentation," it has been interpreted to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. In re Wands, 858 F.2d at 737, 8 USPO2d at 1404 (Fed. Cir. 1988). See also United States v. Telectronics, Inc., 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) ("The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation."). A patent need not teach, and preferably omits, what is well known in the art. In re Buchner, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). >Any part of the specification can support an enabling disclosure, even a background section that discusses, or even disparages, the subject matter disclosed therein. Callicrate v. Wadsworth Mfg., Inc., 427 F.3d 1361, 77 USPQ2d 1041 (Fed. Cir. 2005)(discussion of problems with a prior art feature does not mean that one of ordinary skill in the art would not know how to make and use this feature).< Determining enablement is a question of law based on underlying factual findings. In re Vaeck, 947 F.2d 488, 495, 20 USPQ2d 1438, 1444 (Fed. Cir. 1991); Atlas Powder Co. v. E.I. du Pont de Nemours & Co., 750 F.2d 1569, 1576, 224 USPQ 409, 413 (Fed. Cir. 1984).

M.P.E.P. § 2164.01.

The Examiner has the duty to establish a prima facie case of lack of enablement. As noted above, he must do this by showing that undue or unreasonable experimentation would be required for a person skilled in the art to practice the invention <u>as claimed</u>. Applicant respectfully submits that the invention as claimed in, for instance, claim 1 is fully enabled, not only by the claims but also by the disclosure.

Title: DECOUPLING OF WRITE ADDRESS FROM ITS ASSOCIATED WRITE DATA IN A STORE TO A SHARED MEMORY IN A

Page 3

Dkt: 1376.697US1

MULTIPROCESSOR SYSTEM (As Amended)

Independent claim 1 recites, in pertinent part, "enforcing memory ordering in subsequent load and store requests to the write request address until the write data associated with the write request is written into the shared memory." *See also* original claims 9 & 29. Accordingly, the invention as claimed in claim 1 is enabled without further requiring "comparing memory request address to write address," as asserted by the Examiner. These elements are also fully supported in the specification as originally filed, for example, at p. 5, line 24 through p. 8, line 19. Specifically, Applicant explicitly teaches that "even though the write data and write address are sent at different times, they are received in instruction order at memory," eliminating the need for an identifier associating an address with its associated data. The Specification, at p. 7, line 20 through p. 8, line 6. Applicant further teaches that "[i]nstead, the association [between the address and its associated data] is implied by the ordering." The Specification, at p. 7, line 24; see also original claims 9 & 29. Given the teaching that the association between write address and its respective write data that are sent at different times is enforced by receiving write instructions in order at memory, independent claim 1 is enabled by the disclosure and claims in the original specification.

The Examiner does not provide a rationale why the invention as claimed in, for example, claim 1 would require undue or unreasonable experimentations for a person skilled in the art to practice, despite the sufficient support as discussed above. Therefore, the Examiner has failed to establish a proper prima facie case of lack of enablement as required by M.P.E.P. § 2164.01.

The arguments in favor of patentability of claim 1 apply similarly to independent claims 21, 31, 34, and 38, which recite similar elements.

Therefore, it is respectfully requested that the rejection of independent claims 1, 21, 31, 34, and 38 as failing to meet the enablement requirement under 35 U.S.C. § 112, first paragraph, be reversed.

Claims 1, 21, 31, 34, and 38 were also rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In particular, the Office Action stated, at p. 3, sixth paragraph, that "added limitations of 'pairing within shared memory, the write request address with the separately transferred corresponding write data' were not described in the specification in such a way as to reasonably convey to one skilled in the relevant

Filing Date: August 18, 2003

Title: DECOUPLING OF WRITE ADDRESS FROM ITS ASSOCIATED WRITE DATA IN A STORE TO A SHARED MEMORY IN A

MULTIPROCESSOR SYSTEM (As Amended)

art that the inventor(s), at the time the application was filed." This rejection is respectfully traversed.

INDEPENDENT CLAIMS 1, 21, 31, 34, AND 38 ARE FULLY SUPPORTED BY WRITTEN DESCRIPTION IN THE SPECIFICATION AS ORIGINALLY FILED

A relevant portion of M.P.E.P. provides that:

The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. In re Wertheim, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., In re Marzocchi, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. Wertheim, 541 F.2d at 263, 191 USPQ at 97.

M.P.E.P. § 2163.04.

The Examiner has the duty to establish a prima facie case of lack of written description. As noted above, the presumption is that the disclosure is adequate. The Examiner must overcome this presumption. As noted above, he must do this by presenting a preponderance of evidence why a person skilled in the art would not recognize from the disclosure in the specification the invention as claimed. Applicant respectfully submits that the invention as claimed in, for instance, claim 1 is fully supported by the disclosure in the specification as originally filed.

Independent claim 1 recites, in pertinent part, "pairing, within the shared memory, the write request address with the separately transferred corresponding write data." These elements are fully supported in the original specification, for example, at p. 5, line 24 through p. 8, line 19. As discussed earlier, Applicant explicitly teaches that "even though the write data and write address are sent at different times, they are received in instruction order at memory," eliminating the need for an identifier associating an address with its associated data. The

Serial Number: 10/643,742 Filing Date: August 18, 2003

Title: DECOUPLING OF WRITE ADDRESS FROM ITS ASSOCIATED WRITE DATA IN A STORE TO A SHARED MEMORY IN A

Page 5

Dkt: 1376.697US1

MULTIPROCESSOR SYSTEM (As Amended)

Specification, at p. 7, line 20 through p. 8, line 6. Applicant further teaches that "[i]nstead, the association [between the address and its associated data] is implied by the ordering." The Specification, at p. 7, line 24; see also original claims 9 & 29. Given the teaching that the association between write address and its respective write data that are sent at different times is enforced by receiving write instructions in order at memory, the limitation "pairing, within the shared memory, the write request address with the separately transferred corresponding write data," as recited in independent claim 1, is fully supported in the disclosure of the original specification.

The Examiner does not provide a rationale why a person skilled in the art would not recognize the invention as claimed in, for example, claim 1, despite the sufficient support as discussed above. Therefore, the Examiner has failed to establish a proper prima facie case of lack of written description as required by M.P.E.P. § 2163.04.

The arguments in favor of patentability of claim 1 apply similarly to independent claims 21, 31, 34, and 38, which recite similar elements.

Therefore, it is respectfully requested that the rejection of independent claims 1, 21, 31, 34, and 38 as failing to meet the written description requirement under 35 U.S.C. § 112, first paragraph, be reversed.

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Page 6 Dkt: 1376.697US1 Serial Number: 10/643,742

Filing Date: August 18, 2003

Title: DECOUPLING OF WRITE ADDRESS FROM ITS ASSOCIATED WRITE DATA IN A STORE TO A SHARED MEMORY IN A

MULTIPROCESSOR SYSTEM (As Amended)

CONCLUSION

Applicants respectfully request review of the rejection in the above-identified application, as the Examiner has omitted one or more essential elements needed for a prima facie rejection. The Examiner is invited to telephone the undersigned at (612) 373-6909 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A. P.O. Box 2938 Minneapolis, MN 55402--0938 (612) 373-6909

Date November 19, 2009

Reg. No. 35,075

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this <u>19th</u> day of November 2009.

CHERYL L. KNAPP	1 Cheryl I thapp 1
Name	Signature